

# PATENT ABSTRACTS OF JAPAN

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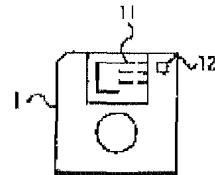
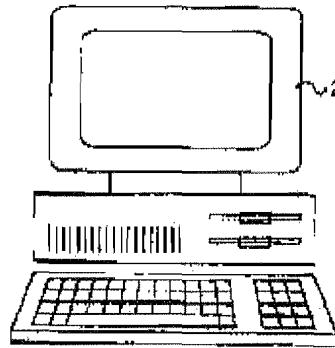
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## (54) RECORDING AND REPRODUCTION SYSTEM, RECORDING MEDIUM, READING AND REPRODUCING DEVICE, AND REPRODUCTION-ONLY DEVICE

### (57)Abstract:

**PROBLEM TO BE SOLVED:** To provide a recording and reproduction system, a recording medium, a recording and reproducing device, and a reproduction-only device, which can easily verify that a recording medium where contents are recorded is illegally copied or used and prevent them.

**SOLUTION:** This system is equipped with the recording medium 1 having a contents recording part 1, a contents recording execution part 21, and a contents reproduction part 22 and records and reproduce the contents; and the recording medium 1 has a surface recording part 12 where a surface identification ID is recorded on its surface and an internal identification ID is recorded at the contents recording part 11. The recording and reproducing device 2 is equipped with a surface ID recording execution part 23 which records the surface identification ID at the surface ID recording execution part 12 and an internal ID recording execution part 24 which records the internal identification ID at the contents recording part 11 of the recording medium 1.



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## CLAIMS

### [Claim(s)]

[Claim 1] The record medium which has the contents Records Department where contents are recorded, In the system which records the contents which consist of a record regenerative apparatus equipped with the contents playback section which reproduces the contents recorded on the contents record activation section which records contents on the contents Records Department of this record medium, and the contents Records Department of a record medium, and is reproduced said record medium It is the record regeneration system characterized by recording the internal discernment ID on the contents Records Department, and equipping a record regenerative apparatus with the internal ID record activation section which records internal discernment ID on the contents Records Department of a record medium while equipping a medium front face with the surface Records Department where the surface discernment ID is recorded.

[Claim 2] The surface discernment ID recorded on the surface Records Department of the above-mentioned record medium in a record regeneration system according to claim 1 and the internal discernment ID recorded on the contents Records Department are a record regeneration system characterized by being the same ID.

[Claim 3] The record medium characterized by recording the internal discernment ID on the contents Records Department while equipping a medium front face with the surface Records Department where it is the record medium which has the contents Records Department where contents are recorded, and the surface discernment ID is recorded.

[Claim 4] It is the record medium characterized by the above-mentioned surface Records Department being attached in a medium front face by a pad or attachment in a record medium according to claim 3.

[Claim 5] The surface discernment ID recorded on the above-mentioned surface Records Department in the record medium according to claim 3 is a record medium characterized by read being possible by non-contact.

[Claim 6] The surface discernment ID recorded on the above-mentioned surface Records Department in the record medium according to claim 5 is a record medium characterized by having the function which manages the record medium by the electronic tag, the bar code, stealth ink use printing, magnetic ink use printing, etc., and is identified.

[Claim 7] The above-mentioned surface Records Department is a record medium characterized by being prepared by attachment of the bar code by which the bar code was printed [ which was set to the record medium according to claim 6 / by which were printed and it was direct-printed ].

[Claim 8] It is the record medium characterized by being based on direct printing for which the above-mentioned surface Records Department used stealth ink in the record medium according to claim 6.

[Claim 9] It is the record medium characterized by being ID for which the above-mentioned surface discernment ID or the internal discernment ID used IPv6 in the record medium given in any 1 term of claims 3-8.

[Claim 10] The record regenerative apparatus characterized by to have the internal ID record activation section which records internal discernment ID on the contents Records Department of the record medium which records the surface discernment ID on the surface Records Department in a record regenerative apparatus equipped with the contents playback section which reproduces the contents recorded on the contents record activation section which records contents on the

contents Records Department of a record medium, and the contents Records Department of a record medium.

[Claim 11] The record regenerative apparatus characterized by having the surface ID read station which reads the surface discernment ID recorded on the surface Records Department of the above-mentioned record medium in a record regenerative apparatus according to claim 10, and the internal ID read station which reads the internal discernment ID recorded on the contents Records Department of a record medium.

[Claim 12] The record regenerative apparatus characterized by having the playback limit section which makes improper playback of the contents recorded on the contents Records Department of a record medium as the surface discernment ID and the internal discernment ID which were read are inharmonious in a record regenerative apparatus according to claim 11.

[Claim 13] In a playback dedicated device equipped with the playback section which reproduces the contents recorded on the contents Records Department of a record medium The surface ID read station which reads the surface discernment ID recorded on the surface Records Department of the above-mentioned record medium, The internal ID read station which reads the internal discernment ID recorded on the contents Records Department of a record medium, The playback dedicated device characterized by having the playback limit section which makes improper playback of the contents recorded on the contents Records Department of a record medium as the surface discernment ID and the internal discernment ID which were read are inharmonious.

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## DETAILED DESCRIPTION

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### [Detailed Description of the Invention]

[0001]

[Field of the Invention] This inventions are a record regeneration system and a record medium, a record regenerative apparatus, and a playback dedicated device, and relate to the system which records contents on the record medium which can especially prevent an illegal copy, an unauthorized use, etc., and is reproduced.

[0002]

[Description of the Prior Art] Reproducing the contents which recorded contents on the contents Records Department, such as a record medium, for example, FD (flexible disk) and CD (compact disk), CD-R, and CD-ROM, using the record dedicated device or the record regenerative apparatus, and were recorded on the record medium with the playback dedicated device or the record regenerative apparatus is performed. complicated, although a means to verify these injustice and to prevent a malfeasance is proposed since the record medium with which contents were recorded is copied illegally conventionally or using improperly is performed -- etc. -- it was inadequate.

[0003]

[Problem(s) to be Solved by the Invention] This invention aims at offering the record regeneration system and record medium which the conventional problem is solved, and the record medium with which contents were recorded can be copied illegally, or it can verify having used improperly easily, and can be prevented, a record regenerative apparatus, and a playback dedicated device.

[0004]

[Means for Solving the Problem] The record medium with which this invention has the contents Records Department where contents are recorded, In the system which records the contents which consist of a record regenerative apparatus equipped with the contents playback section which reproduces the contents recorded on the contents record activation section which records contents on the contents Records Department of this record medium, and the contents Records Department of a record medium, and is reproduced said record medium While equipping a medium front face with the surface Records Department where the surface discernment ID is recorded, the internal discernment ID is recorded on the contents Records Department, and a record regenerative apparatus is a record regeneration system equipped with the internal ID record activation section which records internal discernment ID on the contents Records Department of a record medium.

[0005] Moreover, this invention is a record regeneration system the surface discernment ID recorded on the surface Records Department of the above-mentioned record medium and whose internal discernment ID recorded on the contents Records Department are the same ID.

[0006] And it is a record medium which has the contents Records Department where contents are recorded, and this invention is a record medium with which the internal discernment ID is recorded on the contents Records Department while it equips a medium front face with the surface Records Department where the surface discernment ID is recorded.

[0007] Furthermore, this invention is a record medium with which the above-mentioned surface Records Department is attached in the medium front face by a pad or attachment.

[0008] Moreover, the surface discernment ID by which this invention was recorded on the above-mentioned surface Records Department is a record medium in which read is possible in non-

contact.

[0009] And the surface discernment ID to which this invention was recorded on the above-mentioned surface Records Department is a record medium which has the function to manage and identify the record medium by the electronic tag, the bar code, stealth ink use printing, magnetic ink use printing, etc.

[0010] Furthermore, this invention is a record medium with which the above-mentioned surface Records Department is prepared by attachment of the bar code by which the bar code was printed [ by which were printed and it was direct-printed ].

[0011] Moreover, this invention is a record medium by direct printing for which the above-mentioned surface Records Department used stealth ink.

[0012] And this invention is a record medium which is ID for which the above-mentioned surface discernment ID or the internal discernment ID used IPv6.

[0013] Furthermore, this invention is a record regenerative apparatus equipped with the internal ID record activation section which records internal discernment ID on the contents Records Department of the record medium which records the surface discernment ID on the surface Records Department in a record regenerative apparatus equipped with the contents playback section which reproduces the contents recorded on the contents record activation section which records contents on the contents Records Department of a record medium, and the contents Records Department of a record medium.

[0014] Moreover, this invention is a record regenerative apparatus equipped with the surface ID read station which reads the surface discernment ID recorded on the surface Records Department of the above-mentioned record medium, and the internal ID read station which reads the internal discernment ID recorded on the contents Records Department of a record medium.

[0015] And it is a record regenerative apparatus equipped with the playback limit section which makes improper playback of the contents recorded on the contents Records Department of a record medium as this invention's surface discernment ID and internal discernment ID which were read are inharmonious.

[0016] Furthermore, this invention is set to a playback dedicated device equipped with the playback section which reproduces the contents recorded on the contents Records Department of a record medium. The surface ID read station which reads the surface discernment ID recorded on the surface Records Department of the above-mentioned record medium, It is a playback dedicated device equipped with the internal ID read station which reads the internal discernment ID recorded on the contents Records Department of a record medium, and the playback limit section which makes improper playback of the contents recorded on the contents Records Department of a record medium as the surface discernment ID and the internal discernment ID which were read are inharmonious.

[0017]

[Embodiment of the Invention] The gestalt of operation of this invention is explained. The example of the record regeneration system of this invention and a record medium, a record regenerative apparatus, and a playback dedicated device is explained using drawing 1 – drawing 3 . Drawing 1 is the explanatory view of the record regeneration system of an example 1. Drawing 2 is the explanatory view of the record regenerative apparatus of an example 1. Drawing 3 is the explanatory view of the record regeneration system of an example 2.

[0018] An example 1 is explained. The record regeneration system of this example consists of a record medium 1 and a record regenerative apparatus 2, as shown in drawing 1 . A record medium 1 is FD (flexible disk), and has the contents Records Department 11 and the surface Records Department 12. Contents and the internal discernment ID are recorded and the contents Records Department 11 can presuppose that it is the same as that of the contents Records Department in the record medium of the conventional example. The surface Records Department 12 is established in record-medium 1 front face, and the surface discernment ID is recorded. Read is possible for the surface discernment ID recorded on the surface Records Department 12 non-contact.

Moreover, the surface discernment ID recorded on the surface Records Department 12 has the function which manages the record medium by the electronic tag, the bar code, stealth ink, magnetic ink use printing, etc., and is identified. The surface Records Department 12 can attach by direct printing [ which preparing in record-medium 1 front face by the pad or attachment can be

printed, and attached by attachment of the bar code by which the bar code was printed / by which were printed and it was direct-printed /, and used stealth ink ]. About the internal discernment ID and the surface discernment ID, it mentions later.

[0019] The record regenerative apparatus 2 of an example 1 is a personal computer, and as shown in drawing 2 , it is equipped with the contents record activation section 21, the contents playback section 22, the surface ID record activation section 23, the internal ID record activation section 24, the surface ID read station 25, the internal ID read station 26, and the playback limit section 27. The contents record activation section 21 records contents on the contents Records Department 11 of a record medium 1. The contents playback section 22 reproduces the contents recorded on the contents Records Department 11 of a record medium 1. The surface ID record activation section 23 records surface discernment ID on the surface Records Department 12 of a record medium 1. When attaching in a record medium 1 the surface Records Department 12 which recorded the surface discernment ID, the surface ID record activation section 23 is unnecessary. The internal ID record activation section 24 records internal discernment ID on the contents Records Department 12 of a record medium 1. The internal ID record activation section 24 can make the contents record activation section 21 serve a double purpose. The surface ID read station 25 reads the surface discernment ID recorded on the surface Records Department 12 of a record medium 1. The internal ID read station 26 reads the internal discernment ID recorded on the contents Records Department 12 of a record medium 1. The internal ID read station 26 can make the contents playback section 22 serve a double purpose. Playback of the contents recorded on the contents Records Department 11 of a record medium 1 as the playback limit section 27 has inharmonious surface discernment ID and internal discernment ID which the surface ID read station 25 and the internal ID read station 26 read, respectively is made improper. The playback limit section 27 can make improper playback of the contents recorded on the contents Records Department 11 of a record medium 1, if the surface discernment ID or the internal discernment ID cannot be read.

[0020] The internal discernment ID in an example 1 and the surface discernment ID are ID which has the function which manages a record medium and is identified, for example, are created using IPv6. It is the object for the next generation which extended and had advanced features, IPv6 can be considered as one piece by the address in those with a 128-bit (38th power individual of about  $3.8 \times 10^{38}$ ) part, and the world, is WADE correspondence, and tends to manage Internet Protocol. The surface discernment ID is attached in a record medium using for example, an electronic tag, a bar code, stealth ink use printing, magnetic ink use printing, etc.

[0021] An example 2 is explained. The record regeneration system of this example consists of record-medium 1b and record regenerative-apparatus 2b, as shown in drawing 3 . Record-medium 1b is CD (compact disk), CD-ROM, etc., and has surface Records Department 12b by which the surface discernment ID is recorded on the contents Records Department 11b list on which contents and the internal discernment ID are recorded like an example 1. Record regenerative-apparatus 2bs are for example, CD recorder, a CD-R recorder, and a CD-ROM recorder, like an example 1, it has the contents record activation section, the contents playback section, the surface ID record activation section, the internal ID record activation section, a surface ID read station, an internal ID read station, and the playback limit section, and detailed explanation is omitted.

[0022] Since the surface discernment ID recorded on the surface Records Department is not copied even if it copies the contents and the internal discernment ID which were recorded on the contents Records Department of a record medium, as the above-mentioned example explained, the record medium is understood whether created by the copy according to a regular procedure, and even if a copy is made, it is easily verifiable with it being an illegal copy in later. Moreover, if the information ID recorded on the surface discernment ID and an internal discernment ID medium is not in agreement, an illegal copy and unjust use can be prevented by making playback of contents improper.

[0023] In addition, although the example explained as a record regeneration system which consists of a record medium and a record regenerative apparatus, it is also possible to consider as the regeneration system which consists of the record system and record medium which consist of a record medium and a record dedicated device, and a playback dedicated device.

[0024]

[Effect of the Invention] According to this invention, the record regeneration system and record medium which the record medium with which contents were recorded can be copied illegally, or it can verify having used improperly easily, and can be prevented, a record regenerative apparatus, and a playback dedicated device can be obtained.

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] The explanatory view of the record regeneration system of an example 1.

[Drawing 2] The explanatory view of the record regenerative apparatus of an example 1.

[Drawing 3] The explanatory view of the record regeneration system of an example 2.

[Description of Notations]

- 1 Record Medium
- 11 Contents Records Department
- 12 Surface Records Department
- 2 Record Regenerative Apparatus
- 21 Contents Record Activation Section
- 22 Contents Playback Section
- 23 Surface ID Record Activation Section
- 24 Internal ID Record Activation Section
- 25 Surface ID Read Station
- 26 Internal ID Read Station
- 27 Playback Limit Section

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